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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,174	10/22/2003	Jeffrey J. Folkins	D/A3078Q	6521

37211	7590	09/26/2007
BASCH & NICKERSON LLP		
1777 PENFIELD ROAD		
PENFIELD, NY 14526		

EXAMINER	
QIN, YIXING	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
09/26/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

dneels@bnpatentlaw.com  
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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/691,174	FOLKINS, JEFFREY J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Yixing Qin	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/29/04, 5/17/05, 4/20/06</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1-3 rejected under 35 U.S.C. 103(a) as being unpatentable over Asakawa (U.S. Patent No. 6,604,804)

Regarding claim 1, Asakawa discloses a method to reduce the total inter-document zone (IDZ) region comprising:

a) shifting said zone in accordance with asymmetric timing of start and stop times of processes that must occur during this time; (column 1, lines 23-47, especially lines 43-47, that media can be advanced faster if there is white space. The advancement of data at a faster rate is an adjustment to the paper delivery timing. The IDZ is effectively changed because the data representing the image is advanced faster, indicating that the image to be printed on a sheet of paper is "moved ahead")

b) shifting images forward outside of their normally synchronized position, in multi-pitch intermediate multi-pass systems (c5, line 62 – c6, line 5) where more severe constraints for IDZ exist are for the beginning vs end of transfer, e.g., where the transfer start requires a larger time than transfer stop; (image data for a following page would be printed earlier due to the fact that the Asakawa invention is trying to more effectively use

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the print head swath. Partial images of the end of a page and the succeeding page are printed in the same print swath as opposed to two separate swaths.)

c) using similarly asymmetric IDZ zones and varying their arrangement to process each successive document; (c6, lines 7-24 – the gap can vary in size, meaning the IDZ has to vary according to the variation in the gap)

Asakawa does not explicitly disclose “d) determining the minimum IDZ necessary given the need for larger IDZ for transfer start or other specific IDZ process and the need to provide synchronous images on successive passes within each document.”

However, Asakawa discloses in c8, lines 1-29 the measurement of distances Pd, G and R. While does not explicitly disclose that the blank borders exceed a minimum design distance, the calculation of such information is possible since the Asakawa reference discloses the use of the swath distance to be the sum of the distances Pd, G and R. Also note in column 7, lines 38-51 where the Asakawa invention uses knowledge of the gap size in order to facilitate printing. For the sake of argument, the gap distance, G, has to inherently be above an arbitrary minimum distance in order for it to be identified as a gap according to the Asakawa invention – see column 5, lines 20-44.

Column 8, lines 30-37 discloses the pushing back of data in order to compensate for the blank areas, which is a form of image adjustment.

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Asakawa also discloses in column 1, lines 23-47, especially lines 43-47, that media can be advanced faster if there is white space. The advancement of data at a faster rate is an adjustment to the paper delivery timing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have adjusted various settings in order to improve printing.

The motivation would have been to reduce the time needed to print if adjustments can be made to skip white or blank areas on a page.

Therefore, it would have been obvious to improve to obtain the invention as specified.

Regarding claim 2, Asakawa discloses a method as in claim 1 where the placement of short IDZ's in sequence at locations occurring after each transfer. (the gap after each successive document would create IDZs – see Fig. 3)

Regarding claim 3, Asakawa discloses a method as in claim 1 wherein a next image precesses forward but not in synchronicity with the previous image (as mentioned above, the gap can vary due to the variation in the paper transport mechanism. Since the size of the gap could be unknown prior to the detection of the gap, the next image should not be moved until the size of the gap is detected. Thus, it would be obvious that the next image does not move synchronously with a previous image).

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381.

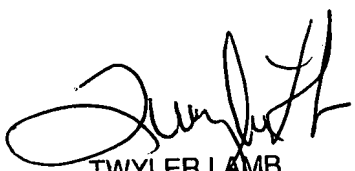
The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



YQ



TWYLER LAMB  
SUPERVISORY PATENT EXAMINER